Heap leaching & dry tailings stacking
Enhance your operational efficiency
The various solutions thyssenkrupp offers for your heap leaching and dry tailings stacking applications enable a range of benefits, including maximum flexibility, lower investment costs, fewer fatigue issues, and de-bottlenecking of operating time.

For heap leaching and dry tailings stacking applications thyssenkrupp's product portfolio includes mobile bridge solutions, which can be equipped with bucket wheel reclaimers, stackers travelling on the mobile bridge, and a stacking solution decoupled from the mobile bridge – the lizard®. This mobile stacking bridge combines two established technologies, the conveyor bridge and crawler-mounted tripper car, to lower investment costs and reduce fatigue issues. Moreover, extended range and operability can be achieved by integrating grasshoppers and mobile stackers into your solution.

“Tailored solutions from thyssenkrupp based on decades of experience with references all over the world.”

Heap leaching

Leaching is a technology to extract precious metals, copper, uranium or other combinations from ore via chemical reactions that absorb specific minerals and then re-separate them after their division from other earth materials. The common methods in the mining world are heap leaching and in-situ leaching. With heap leaching the ore is piled onto a site equipped with seals and drainage and then doused with leach. As the leach runs through the ore, precious metals are released and flow together with the leach via the lower drainage. Heap leaching is carried out either on permanent pads or on on-off pads. The heaping of pads is done with conventional stacking methods (e.g. stacker) or special solutions such as a mobile stacking bridge or the lizard® mobile stacking bridge.

Key operational benefits

• De-bottlenecking of operating time through mobile bridge systems
• Maximum flexibility through integrating grasshoppers
• Lower investment costs and fewer fatigue issues on bridge structures thanks to lizard®
• Solutions for both stacking and reclaiming
• Automation features like “float” multi crawler control mechanism

Dry tailings stacking

Tailings are fine-grained residues in the form of sludge resulting from the treatment of ores. Dewatered stockpiling (dry stacking) is a safer alternative to tailings dams for tailings disposal. Dry stacking is applied in areas with limited space and water resources, and where topographic and geotechnical conditions prohibit conventional impoundments (wet tailings). Dried tailings can no longer be pumped and therefore spilled with typical mining equipment.